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## Patent Abstracts of Japan

PUBLICATION NUMBER : 2000319011  
PUBLICATION DATE : 21-11-00

APPLICATION DATE : 07-05-99  
APPLICATION NUMBER : 11127250

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INT.CL. : C01B 31/02 A61L 9/16 B01D 53/34 B01D 53/81 B01D 53/50 B01D 53/70 B01J 20/20

TITLE : CALCIUM-CONTAINING POROUS CARBON MATERIAL

ABSTRACT : PROBLEM TO BE SOLVED: To efficiently remove chlorine-containing gases, SO<sub>x</sub>, etc., in waste gas by carbonizing a vegetable porous material after immersion in a calcium hydroxide solution or suspension in such a way that calcium compounds are finely and highly dispersed in the resulting carbonized texture.

SOLUTION: A vegetable porous material such as ordinary wood with tracheae or tracheids is immersed in a calcium hydroxide solution (lime water) or suspension (milk of lime) for about  $\geq 3$  hr in such an extent that lime does not stick to the surface of the material. The material is then taken out, dried and carbonized at about 400-1,300°C, preferably 600-1,000°C using an ordinary carbonization furnace in such a way that calcium compounds (mainly CaCO<sub>3</sub>) are finely and highly dispersed in the resulting carbonized texture. Palm fibers, jute, flax or areca may be used as the vegetable porous material. It is necessary that about  $\geq 1\%$  (expressed in terms of Ca) calcium compounds are incorporated so as to enhance reactivity.

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